NAWMP Science Support Team
Bismarck, North Dakota
October 10-11, 2001
Meeting Notes

The purpose of the meeting was to discuss work undertaken by NSST Working Groups on technical information for the next NAWMP update, explore the conceptual approaches used to develop that information, reach consensus on outstanding issues, and identify tasks that need to be accomplished prior to the Update. All existing NAWMP Joint Ventures were represented except San Francisco Bay and Upper Mississippi/Great Lakes. Three of the four Flyway Councils was represented by a member of their respective Technical Sections. (See list of Attendees)

Seth Mott, Rex Johnson and Mark Koneff were the organizers of the meeting. Ron Reynolds and the staff of the Bismarck HAPET Office provided the meeting space and refreshments.

Agenda

Day One

8:00 **Welcome, Introductions, Logistics**

8:15 **Report from the NAWMP Committee Meeting**
Guidance on the 2003 Update

9:00 **Population Objectives**
Report from the Working Group on possible approaches to setting continental objectives

13:00 **Further discussion on population objectives, finalize procedures and approach for determining population objectives, identify data gaps, assign tasks for completion**

15:30 **Proposal for a NAWMP Science Forum**

Day Two

8:00 **Prioritization**
Report from the Working Group on possible approaches to establishing species and geographic priorities

9:00 **Discussion**

13:00 **Further discussion on prioritization, finalize procedures and approach for**

determining waterfowl priorities for conservation, identify data gaps, assign tasks for completion

15:00 Habitat Objectives and their role in the 2003 NAWMP

Seth Mott gave a brief report on the NAWMP Committee meeting held in Wichita. The Plan Committee believes the 2003 Update document should be a review of the first 15 years of the NAWMP, highlighting the accomplishments and advances contained in the original Plan and the two subsequent Updates. The 2003 document should also establish the challenge and commitment for waterfowl conservation for the future. There is still uncertainty regarding a specific timeframe to be addressed in the 2003 document however the Plan Committee believes that the NAWMP should by a continuous endeavor for the advancement of waterfowl conservation. While not retreating from the partnership and landscape visions of the 1998 Update, the Plan Committee wants the 2003 update and future focus of the Plan Committee to be on waterfowl and improving the scientific foundations of our conservation actions.

Mark Koneff gave a report from the Population Objectives Working Group and lead a discussion on this topic:

Concerning population objectives in the 2003 NAWMP, t**he NSST agreed to the following**:
A) Objectives should be...

1) Communicable --- easy to understand and communicate,
2) Consistent -- with Flyway mgt plans, with the scale at which we are currently managing a species (continental population or subpopulations),
3) Comparable - quantitative, monitoring program to track parameter, scalable to account for uncontrolled environmental variability when appropriate.

B) Objectives will continue to be based on abundance, rather than some other metric such as density.

C) In the 2003 NAWMP we will describe the philosophy and the general process of scaling continental objectives to regional population objectives, and the relationship of regional habitat objectives and conservation strategies to regional population objectives. This is essentially the conceptual planning process we are all familiar with. There are several good JV case studies that could be presented in the NAWMP to illustrate this process.

D) We were comfortable with the notion of scalable objectives that enable the factoring out of uncontrolled sources of environmental variation so that objectives can be more easily compared to monitoring results. More exploratory work will be conducted...see below.

E) It will be important to specify in the 2003 NAWMP the criteria and process used in reviewing and revising NAWMP population objectives.

F) We will identify specific monitoring programs that are used to track population status in relation to objectives. We will also describe monitoring needs for those species/populations for which we have been unable to set objectives because of inadequate monitoring.

G) We will no longer include goals in the NAWMP which are impossible to compare with monitoring results. In particular, the 62 million breeding population, and 100 million fall flight general duck goals will be dropped with Plan Committee approval.

Some Specific Tasks identified for further attention include:

A) Questions for Jose Guevara and other Mexican NSST members:

1) Can you identify monitoring necessary to establish populaton objectives for the masked duck, muscovy, and black-bellied and fulvous whistling ducks?

2) Do you wish to recognize the Mexican duck as a distinct stock in the 2003 NAWMP? Official U.S. policy presently says that no Mexican ducks occur north of the U.S.-Mexico border.

3) If you wish to recognize the Mexican duck, can you identify monitoring programs necessary to establish a population objective for these birds?

B) Seaducks - Tim Bowman will provide a description of monitoring necessary to establish objectives for all seaduck species. A brief discussion about concerns over seaduck population status will also be provided.

C) Black Duck - Jim Wortham will discuss the black duck population objective with the BDJV. Presently a mid-winter objective of 385,000 black ducks is used. Given that operational breeding population surveys now occur annually in eastern Canada and the U.S., the BDJV has had discussions about converting the black duck objective to a breeding population objective. Several initiatives are underway through the BDJV that may have bearing on this issue.

D) Eastern Mallards -- Mark Koneff with contact Jerry Serie regarding the development of a population objective for eastern mallards. Eastern mallards are now identified and managed as a distinct stock. According to the review criteria we have established, a population objective should be established for eastern mallards. This issue will undoubtably require significant discussion and debate among the Atlantic Flyway Council and the Division of Migratory Bird Management. Unfortunately the Atlantic Flyway Council was unrepresented at the NSST meeting.

E) Mottled duck - Barry Wilson will review monitoring programs and will recommend monitoring necessary to establish a population objective for Mottled ducks.

F) Wood duck - Mark Koneff will contact Jim Kelley.

G) Presentation of duck objectives in the 2003 NAWMP -- Mark Koneff will prepare tables for 2003 NAWMP according to consensus on their structure that was reached at last week's meeting. This structure is as follows...

Table 1: will present Mid-continent estimates, Other surveyed area estimates (eastern surveys and certain state surveys), and Unsurveyed area estimates. Bob Trost and Andre Breault will take the lead in estimating populations of all waterfowl species outside currently surveyed areas using methods similar to those used in past for mallard population derivations.

Table 2: will present duck population goals with manner of presentation similar to the 1998 Update. Eastern mallards may be included. Species/populations represented in Table 1 but not in Table 2 are not presently monitored sufficiently to establish population objectives. Monitoring programs and monitoring needs will be described in accompanying text. Additionally, scalable objectives will be identified in the Table 2, and additional detail provided regarding their derivation in the text.

H) Geese and Swans - Tim Moser, representative from the Arctic Goose JV, will coordinate with the USFWS Flyway representatives to review goose and swan objectives for consistency with Flyway plans, to document the name of the survey by which population status is tracked, and to describe additional monitoring needs for geese and swans. The 2003 NAWMP should include maps of the breeding and wintering distributions of recognized goose and swan population. Mark Koneff will compile these maps with the assistance of Tim. Mark Koneff will also look to Tim Moser and the USFWS Flyway representatives to update population status and trends information for the goose and swan tables following the 2002/3 surveys.

I) Distributional Objectives -- we will recapture, from the 1986 NAWMP, the general principle/desire to maintain the historical distribution and diversity of waterfowl, both for the sake of population resiliency and recreational opportunity. Additionally, in the narrative of the 2003 NAWMP, we will describe the breeding duck "carrying capacity" that should be maintained in the U.S. and Canada. This is particularly important in relation to long-term maintenance of populations in the face of uncontrolled weather variations in the Prairie Pothole and Parkland Regions. Rex Johnson, Ron Reynolds, Dale Caswell, Mike Anderson, and Mark Koneff will make recommendations on these carrying capacities and document methods and assumptions.

J) Scalable Objectives -- Mark Koneff will continue to explore bird abundance-environment (specifically PDSI) relationships for possible inclusion of scalable objectives in the 2003 NAMWP.

If possible, information from items A-J specified above should be submitted to Mark by January 31, 2002. This would be prior to the next NSST meeting and would give us a chance to review everything as a group before incorporation into the draft 2003 NAWMP in the spring. If specific tasks take longer to accomplish, we'll have to work out a new deadline.

Mike Anderson and Seth Mott discussed a proposal to conduct a NSST Science Forum

The idea of conducting a NAWMP/NSST Science Forum was discussed and approved at the Plan Committee meeting. The purpose of the Forum would be to:

1. Improve mutual understanding about biological foundation issues between the Plan Committee and the NSST.
2. Further the dialog between the Plan Committee and the JVs about NAWMP's biological foundations and waterfowl conservation needs.
3. Clarify important knowledge gaps & adaptive processes that ought to be addressed in the 2003 revision of the North American Waterfowl Management Plan**.**
4. Share and consolidate knowledge of how evaluations and re-planning have improved JV effectiveness

A draft outline of the proposed forum (see attachment) was discussed. Based on comments from the entire group, Mike Anderson will revise the outline. Seth will circulate this among the NSST and seek concurrence on moving ahead with planning the Forum. The general intent is to hold the forum at a time in the Update process that can provide input to the Plan Committee and drafting team.

Rex Johnson gave a report from the Species and Geographic Priorities Working Group outlining suggested approaches for development of NAWMP priorities and lead a discussion on this topic:

Highlights of Rex's report:

The NAWMP Committee has asked the NSST to define Plan priorities at a scale that provides species and geographic guidance to Plan partners working at the Joint Venture and BCR level .

Why Prioritize? 1. Refocus conservation delivery, 2. Communicate species and region priorities to NAWCC and others, 3. Affirm Plan's Biological Foundation

The prioritization strategy should reflect the reasons that the public values waterfowl – concern for rare or declining species and socio-economic importance (species important for recreation or cultural reasons)

Continental-scale prioritization

1. Population Trend - Calculate slope on each species trend, 1955-2000
   (+ slope) = 1 (0 or no slope)=2 (- slope, or unknown)=3

2. Socio-economic Importance - (use a species % of continental sport harvest As a surrogate measure of importance)

0-1% = 1 (e.g., oldsquaw)
1-10% = 2 (e.g., pintails, scaup)
>10% = 3 (e.g., mallards, green-winged teal)

Continental-scale prioritization – species priority score = sum of trend score and harvest score

some examples
Mallards - 2 + 3 = 5
Pintails - 3 + 2 = 5
Gadwall - 1 + 2 = 3
White-winged scoter - 3 + 1 = 4
Ruddy Duck - 1 + 1 = 2

Preliminary Results

Highest (5)	Moderately High (4)	Moderate (3)
Mallard	American Wigeon	Gadwall
Northern Pintail	American Green-winged Teal	Northern Shoveler
Black Duck	Blue-winged and Cinnamon Teal	Greater Scaup
Lesser Scaup	Redhead	Ring-necked Duck
Wood Duck	Canvasback	Barrow's Goldeneye
	Common Goldeneye	Bufflehead
	Oldsquaw	
	Harlequin	Low (2)
	Common Eider	Common Merganser
	King Eider	Red-breasted Merganser
	Spectacled Eider	Hooded Merganser
	Steller's Eider	Ruddy Duck
	Black Scoter	
	White-winged Scoter	
	Surf Scoter	

Geographic prioritization

Use Bird Conservation Regions as geographic units for prioritization analysis

Score each BCR for each species by summing a qualitative score for % of continental population, density, and threats to habitat. Priority is determined by using the summed scores to determine relative BCR ranks for each species. Separate analysis is conducted for breeding and

wintering periods.

Example: Breeding Gadwall

BCR	Percent Score	+	Density Score	+	Threat	=	Total	Priority
5	2		4		8			Moderate
6	4		2		3		9	Mod. High
8	2		2		2		6	Moderate
9	5		5		2		12	High
10	4		3		2		9	Mod. High
11	5		5		5		15	High
12	1		1		4		6	Moderate
13	1		1		4		6	Moderate
14	1		1		2		4	Low
15	2		3		2		7	Moderate
16	3		3		2		8	Moderate
17	4		5		2		11	Mod. High
18	2		3		3		8	Moderate
19	2		2		4		8	Moderate
21	1		1		2		4	Low
22	1		1		5		7	Moderate
23	2		2		5		9	Mod. High

30		1	
	2	4	7
		Moderate	
33		2	
	2	1	5
		Low	
34		2	
	2	1	5
		Low	
35		1	
	1	1	3
		Low	
36		1	
	1	4	6
		Moderate	

Relationship with PIF assessment scores - Relationship with PIF assessment scores - During the discussion on how to develop the threats to habitat score for each BCR, Mike Carter proposed that the NSST adopt the PIF species assessment methodology but sum only the fields NAWMP thinks are appropriate. While there was some agreement that using a similar approach for determining threats to habitat scores had merit, the discussion turned toward a general critique of the PIF process in regard to its use for determining waterfowl priorities. The group generally agreed that using a common assessment methodology for all birds may lead to

an inappropriate comparison of priorities across different bird initiatives. To prevent this, the group believes that waterfowl should not be included in PIF-generated species assessment analysis.

Unresolved Issues for Geographic prioritization

How to consider migrational areas ?

Should we generate a single map of geographic priorities by weighting species by continental ranks and then aggregating species maps?

Prioritization Decisions and Action Items:

Continental Species Prioritization:

We will foot-note species with populations that are (1) rare or significantly below an accepted population goal; or (2) stable or increasing species with a large allopatric populations in decline.

For prioritization analysis we will lump greater and lesser scaup

Jeff Drahota will get Mexican harvest data (needs review by Mexican NSST)

Rex/Seth will get trend data for Mexican endemics via consultation with Mexican NSST members

Bob Trost, Tim Moser., Dale Caswell, Guy Zinner– Provide goose subspecies/population mean harvest estimates

Tim Moser. – get goose subspecies/population trends from status report (use goose subspecies/population list from 1998 update + W. High Arctic Brant)

The following information is needed from Mexico:

1. Provide an estimate of long-term (full period of record for the species) and short-term trend for muscovy, masked duck, fulvous whistling duck, and black-bellied whistling duck. If trend can't be estimated quantitatively, qualitatively assess trend as: **DECLINING, UNKNOWN, STABLE,** or **INREASING.**

2. Report any of these species for which the mean annual sport harvest in Mexico is >125,000 birds (and provide an estimated mean Mexican harvest for species that occur in the US and Mexico - if possible. Ideally, means should be estimated for the period 1980-1999)

Geographic prioritization

Bob Trost, Tim Moser., Dale Caswell, Guy Zinner will get the percent of each goose subspecies/population wintering in each BCR (use colony sites where appropriate for breeding) – if percent is not available classify importance of each BCR as High, Moderately High, Moderate, Low (and absent)

Tim Bowman will do the same for breeding and wintering sea ducks.

We will modify BCR boundaries by using species range maps (breeding and wintering) to remove areas from BCRs that are beyond a species' normal range.

Insert critical (major) staging areas into species priority maps and into overall geographic priorities maps

We will aggregate species geographic priorities by season. Keep ducks, geese and swans separate and keep breeding and wintering separate.

We will review PIF threat scores – adjust and use – submit revisions to PIF/RMBO. Eventually, review PIF parameter scores and request that waterfowl not be total scored in a common data base.

The following information is needed from Mexico:

1. Estimate the number of birds of each species listed in the 1998 NAWMP wintering in each Mexican BCR. Do the same for the breeding season. If quantitative estimates are not available, qualitatively describe the importance of each BCR for breeding and wintering waterfowl by species listed in the 1998 NAWMP - describe the number of birds in each BCR as **HIGH, MODERATELY HIGH, MODERATE, AND LOW**. Do this only for BCRs in the primary range of the species. No more than 1/4 of the BCRs in the primary range may be assigned to the **HIGH** category and no more than 1/4 may be assigned to the **MODERATELY HIGH** category.

2. Assess threats to breeding habitats and wintering habitats for each species that breeds or winters in Mexico using the following criteria: (Keep lists for breeding and wintering seasons separate)

Very Low (1) - Expected future conditions better than historic conditions - possibly becoming a problem species because of habitat enhancement

Low (2) - Expected future conditions similar to historic conditions - no known threats

Moderate (3) - Slight to moderate decline in future habitat abundance or quality but current conditions similar to historic conditions - or - future conditions expected to be stable but significant losses of habitat have already occurred.

Moderately High (4) - Severe past or predicted deterioration or decline in habitat availability or quality.

High (5) - Extreme past or predicted deterioration or decline in habitat availability or quality - species in danger of regional extirpation.

Return all comments/data to Rex Johnson – rex_johnson@fws.gov
USFWS

21932 State Highway 210 East
Fergus Falls, MN 56537
218-736-0606

Habitat Objectives

The group briefly discussed how habitat objectives should be portrayed in the 2003 NAWMP. Habitat objectives included in the 1994 and 1998 Updates were derived by individual Joint Ventures without the benefit of a common approach for linking continental population goals with habitat objectives. Even those Joint Ventures that took the lead in developing links between NAWMP goals and JV objectives now find it judicious to revise their objectives using knowledge gained from research, monitoring, and assessment. The 2003 NAWMP, in meeting the Plan Committee's goal for improving biological foundations, will discuss in detail approaches to regional biological planning that link with continental NAWMP goals. Most Joint Ventures, however, will not be able to provide new or revised habitat objectives that result from these approaches before publication of the 2003 document. Consensus of the group was to include in a table current JV habitat objectives, while stressing the need for all JVs to conduct recurrent strategic planning using NAWMP guidance and contemporary biological information and knowledge.

Next Meeting

There was no determination of the next meeting date. It will be determined by the progress made on the tasks identified above and the development and organization of the Science Forum. Until then, we will communicate as needed by email.

Meeting Attendees

Seth Mott	U.S. Fish and Wildlife Service
Tice Supplee	Arizona Game and Fish
Mike Carter	Playa Lakes Joint Venture
Mike Anderson	Ducks Unlimited Canada
Mike Johnson	North Dakota Game and Fish
Andy Schollett	Northern Great Plains Joint Venture
Ron Reynolds	U.S. Fish and Wildlife Service/PPJV
Guy Zenner	Iowa Dept. Natural Resources
Dale Caswell	Canadian Wildlife Service
Bob Trost	U.S. Fish and Wildlife Service
Chuck Loesch	U.S. Fish and Wildlife Service

Mark Koneff	U.S. Fish and Wildlife Service
Rex Johnson	U.S. Fish and Wildlife Service
Al Hanson	Canadian Wildlife Service
Jim Wortham	U.S. Fish and Wildlife Service/BDJV
Tom Aldrich	Utah Division of Wildlife Resources
Tim Bowman	U.S. Fish and Wildlife Service/SDJV
Mike Eichholz	Central Valley Habitat Joint Venture
Tim Moser	U.S. Fish and Wildlife Service/AGJV
Andre Breault	Canadian Wildlife Service
Chuck Hayes	U.S. Fish and Wildlife Service/ACJV
Randy Wilson	U.S. Fish and Wildlife Service/LMVJV
Barry Wilson	Gulf Coast Joint Venture
Jeff Drahota	U.S. Fish and Wildlife Service/RWBJV

NAWMP Science Forum
Statement of Purpose and Outline
September 25, 2001

NAWMP Science Forum – Building understanding and consensus for 2003

Purposes

1. Share and consolidate knowledge of how evaluations and re-planning have improved JV effectiveness.
2. Improve mutual understanding about biological foundation issues between the Plan Committee and the NSST.
3. Further the dialog between the Plan Committee and the JVs about NAWMP's biological foundations and waterfowl conservation needs.
4. Clarify important knowledge gaps & adaptive processes that ought to be addressed in the 2003 revision of the North American Waterfowl Management Plan.

Who Should Attend?

North American Waterfowl Management Plan Committee

NAWMP Science Support Team

JV Coordinators, Management Board members, Technical Committee members (1 or 2 people from each JV)

Approximately 50 people altogether

When?

Tentatively, 3 days in early January 2002

Where?

TBA - Somewhere in the southern U.S., with good airline connections and a local volunteer for logistical support.

Preliminary Agenda

Day 1

0800 - 0830 Introduction – Setting the Stage

Reports from Habitat Joint Ventures Planning—Implementation—Evaluation Using learning cycles to improve program delivery:

At a minimum, each JV should:

Give a 5 minute presentation identifying a biological assumption that underlies their JV implementation strategy.

Describe an example of how learning has changed an aspect of JV implementation.

Identify a key issue of biological uncertainty for investigation in the near future.

To the extent time is available, longer presentations that provide more detail on specific planning/evaluation approaches taken by individual Joint Ventures will be considered.

0830 – 1600 Reports from each habitat JV

1600 – 1630 Mexico: NAWMP Progress, Plans and Needs

The Needs of Problematic Species

1630 – 1650 Sea Duck Joint Venture Progress and Information Needs

DAY 2

0800 – 0830 Arctic Goose Joint Venture Progress and Information Needs

0830 – 0900 Black Duck Joint Venture Progress and Information Needs

0900 – 0930 Northern Pintails

0930 – 1000 Scaup

Break

1020 – 1050 Climate Change and Waterfowl Conservation

1050 – 1120 Over-Arching Issues of Continental Importance for Waterfowl

1120 – 1150 Synergies between ARM for the North American Waterfowl Management Plan and Adaptive Harvest Management

Lunch

1300 – 1330 Waterfowl Population Monitoring Improvements and Future Needs

1330 – 1350 Institutional Frameworks and Process Needs for Effective Adaptive Management of Plan Programs

1350 – 1400 Wrap up – Where to from here?

Break

1420 – 1700 (First Breakout Sessions)
North American Waterfowl Management Plan Committee
NAWMP Science Support Team

Day 3

0830 – 930 NSST Recommendations for the Plan Committee Regarding the 2003 Plan Revision

930 –1030 (Second Breakout Sessions)
North American Waterfowl Management Plan Committee
NAWMP Science Support Team

Break

1100 – 1200 Final Joint Session: Next steps in Preparing the 2003 Plan Revision

Afternoon: Travel home